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In the Specification:

- Please amend the paragraph starting on page 11, line 1, as follows:

Both data and voice calls arriving at Internet off-load switch 310 from either client side modem 304 or telephone 306 are received by receiver 313 of subscriber line interface circuit ("SLIC") 312, which can be configured to distinguish between data and voice calls based on, for example, the number dialed. In the event of a data call, SLIC 312 can be additionally configured to determine whether client side modem 304 can support a high speed modem rate based on, for example, a message, indication, tone, handshaking process or other suitable protocols. Further, SLIC 312 can be configured to convert, or "digitize", both data and voice calls into digital form for transmission over digital networks. Calls determined by SLIC 312 to be voice calls can be digitized by SLIC 312 using a conventional A/μ-law pulse code modulation ("PCM") method. After digitization by SLIC 312, voice calls can be diverted to trunk 318 via time division multiplexed ("TDM") bus 314 and transmitted to digital switching network 324 via TDM bus 322. As is known, voice calls digitized using A/μ-law are typically sampled at 8 kHz with 8 bits per sample, resulting in a 64kbps data rate. Thus, a voice call can be transmitted over a TDM bus using a single digital signal ("DS0") channel. Additionally, SLIC 312 receives digitized signals from digital switching network 324 via TDM bus 322, trunk 318 and TDM bus 314 and converts the signals to analog form for transmission to telephone 306 over local loop 308.

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- Please amend the paragraph starting on page 11, line 18, as follows:

In one embodiment, processor 315 of SLIC 312 can be configured to convert data using a linear coding method with a sampling rate of at least 16 kHz with an 8 bits/sample. For example, the sampling rate may be 24 kHz, 32 kHz, 48 kHz and so on. In a preferred embodiment, the format for the digitized analog samples is linear/uniform spacing rather than A/μ-law PCM. In one embodiment, the analog data signal is digitized by SLIC 312 without 4 kHz filtering. The digitized signal is then diverted to trunk 320 over TDM bus 316 using transmitter 317, and depending on the particular sampling rate of SLIC 312, one or more DS0 channels may be utilized to provide sufficient bandwidth for carrying the signal. For example, if SLIC 312 digitizes data at 16 kHz with an 8 bits/sample, or preferably at a higher rate, the resulting digitized signal would be at 128kbps and thus may require two DS0 channels. From trunk 320, the digitized signal is transmitted to remote access server ("RAS") 332. In one embodiment, transmission of the digitized signal to RAS 332 is achieved over IP link 326, which is a packet-based connection. In another embodiment, the digitized signal is transmitted to RAS 332 via TDM bus 328, and in such embodiment, a sufficient number of DS0 channels may be used to carry the signal. As shown, digitized signals arriving at RAS 332 are received by RAS modem 330, which is also referred to as a "terminating modem" in the present application. The digitized signals can be demodulated by RAS modem 330 and transmitted to Internet 334. In one embodiment, RAS modem 330 can be configured to demodulate the digitized signal at a speed compatible with the digitization rate of SLIC 312.